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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/425,630	10/22/1999	SHINGO HAMADA	400388/TSINT	9818

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EXAMINER

DICKENS, CHARLENE

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/425,630

Applicant(s)

HAMADA ET AL.

Examiner

Ex. Dickens

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6-15, 17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6-15, 17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/1/03 has been entered.

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second pair of inner wall surfaces are converging and wherein the measuring duct has a portion to the flow rate detector substantially smoothly narrowing in the longitudinal direction of the elongated shape must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2-4, 6-15, 17, and 19 are rejected under 35 U.S.C.

112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant by the recitation of wherein the measuring duct has a portion to the flow rate detector substantially smoothly narrowing in the longitudinal direction of the elongated shape in claim 15. It is also not clear, in claims 4 and 9, how the second pair of inner wall surfaces are converging.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2-4, 6-15, 17, and 19 are rejected under 35 U.S.C.

102(b) as being anticipated by US Patent No. 6,240,775 ('775).

The ('775) teaches flow rate measuring device (Fig. 31)

comprising: a post located in a fluid passage and extending across a part of the fluid flow; a measuring duct 43 including a fluid introduction port with an elongated shape confronting a flow direction of the fluid flow and having a longitudinal direction; a flow rate detector located in the measuring duct and comprising a substantially plate-shaped mounting member 23 extending along the fluid flow and bridging the measuring duct, substantially parallel to the longitudinal direction of the

elongated shape of the fluid introduction port, a flow rate detection element 22 on a main surface of the mounting member, wherein the measuring duct has a portion to the flow rate detector substantially smoothly narrowing in the longitudinal direction of the elongated shape. Claim 2: the measuring duct extends substantially linearly in a direction from an upstream side of the fluid passage toward a downstream side of the fluid passage (Fig 31);

Claim 3: wherein the introduction port has a length in the longitudinal direction and width in a transverse direction, transverse to the longitudinal direction, the longitudinal length being substantially at least twice the width (Fig 31);

Claims 4, 9, 17: the measuring duct includes a first pair of generally smooth, converging inner wall surfaces, narrowing toward a downstream direction of the fluid flow, each of the smooth inner wall surfaces having a profile, in a cross-section parallel to the fluid flow direction and parallel to the fluid flow direction and to the post, and a second pair of generally smooth converging inner wall surfaces, generally transverse to the first pair of inner wall surfaces, narrowing in the downstream direction, and having a curved profile, including a inflection point, in a plane perpendicular to the fluid introduction port and parallel to a longitudinal direction of the fluid introduction port (Fig. 31);

Claims 6, 7: the measuring duct narrow to at least a position where an upstream end of the flow rate detector is located (Fig. 31);

Claim 8: the fluid introduction port has, in a plane perpendicular to the fluid flow, a closed curve shape (Fig. 30);

Claims 10, 19: the measuring duct includes a notch at a single hole (Fig. 30);

Claim 11: the measuring duct includes an outer wall surface that, at least in part, extends outwardly (Fig. 31);

Claims 12, 13: projections 43a located at at least one pair of long sides and short side of the fluid introduction port (Fig. 31); and

Claim 14: the post extends into the fluid passage through an opening in a side wall of the fluid passage (Fig. 31);


7. Applicant's arguments with respect to the claim have been considered but are moot in view of the new ground(s) of rejection.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dickens or the supervisor, Edward Lefkowitz, whose telephone numbers are (703) 305-7047 or 305-4816, respectively. Any inquiry of a general nature or relating to the status of this

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application should be directed to the receptionist or the customer service representative whose telephone numbers are (703) 308-0956 or (703) 308-4800 respectively. The fax numbers are (703) 305-3431 and (703) 305-3432.


cd/dickens
May 14, 2003


EDWARD LEFKOWITZ
SUPERVISORY PATENT EXAMINER
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